

Appl. No. 09/893,032
Amdt. Dated December 19, 2003
Reply to Office Action of August 27, 2003

Attorney Docket No. 81784.0239
Customer No.: 26021

REMARKS/ARGUMENTS

Claims 1-6 were pending in the application. By this Amendment, claim 2 is being rewritten in independent form with claims 1, 3 and 4 being cancelled, claim 5 is being amended to change the dependency thereof, and new claims 7-18 are being added, to advance the prosecution of the application. No new matter is involved.

In Paragraph 3 which begins on page 2 of the Office Action, claims 1, 3 and 4 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,818,801 of Watanabe, et al. In Paragraph 5 which begins on page 3 of the Office Action, claims 5 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Watanabe '801 in view of U.S. Patent 6,292,440 of Lee. These rejections are respectfully traversed. However, and as noted above, claims 1, 3 and 4 are being cancelled, and new claims 7-10 are being added. Claim 5 is being amended to depend from new claim 9, while claim 6 continues to depend from claim 5. Claims 5-10 are submitted to clearly distinguish patentably over the art for the reasons discussed hereafter. Similar comments apply to new claims 11-18 which depend from one of new claims 7, 8 and 9.

New claim 7 is similar to prior claim 1 but adds considerable limitations thereto. In addition to a signal processing circuit having a CD-ROM decoder and an anti-shock controller, together with a memory, the CD-ROM decoder is defined as for writing, when the CD from which the signal is to be reproduced is a CD-ROM, incoming CD-ROM data into the memory, and decoding the CD-ROM data while reading out the CD-ROM data from the memory. The anti-shock controller is further defined in terms of causing, when the CD from which the signal is to be reproduced is a CD-DA, a predetermined amount of incoming CD-DA audio data to be stored in a memory. In addition, claim 7 defines "a first arbiter for generating an output signal for controlling said memory according to a repressed signal from said

CD-ROM decoder”, “a second arbiter for generating an output signal for controlling said memory according to a request signal from said anti-shock controller” and “a selection circuit for selecting an output signal from said first or second arbiter”. Claim 7 still further defines the signal processing circuit in terms of “an output signal from said first arbiter is selected by said selection circuit when the CD from which the signal is to be reproduced is a CD-ROM, and, when the CD from which the signal is to be reproduced is a CD-DA, an output signal from said second arbiter is selected by said selection circuit”.

In contrast to prior art circuits such as that shown in Watanabe '801, signal processing circuits in accordance with the present invention as defined in claim 1, for example, use each memory effectively. The entire memory is shared between a CD-ROM decoder and an anti-shock controller. The prior art, taken alone or in combination, does not show or suggest the signal processing circuits in accordance with the invention.

New claims 8, 9 and 10 depend from and further define new claim 7 in terms of additional limitations which clearly distinguish patentably over the art. In the case of claim 8, such claim further defines the signal processing circuit in terms of “an access control circuit for outputting to said memory, based on an output signal from said selection circuit, at least an address signal for said memory, a write-enable signal, and a read-enable signal”. Claim 9 further defines claim 7 in terms of “an MP3 decoder for performing MP3 decoding on data encoded in MP3 format and output from said CD-ROM decoder”. New claim 10 further defines claim 7 in terms of “when the CD from which the signal is to be reproduced is a CD-ROM, said CD-ROM decoder operates while said anti-shock controller stops operation, and, when the CD from which the signal is to be reproduced is a CD-DA, said anti-shock controller operates while said CD-ROM decoder stops operation”.

New claims 11-18 depend from one of new claims 7, 8 and 9 and add further limitations thereto so as to even further distinguish patentably over the art.

New claim 11 recites the feature that the access control circuit receives an input of an address data from the CD-ROM decoder or the anti-shock controller. This feature is disclosed in Fig. 2, at line 1 of page 6 and at lines 14-18 of page 6 of the specification.

New claim 12 recites the feature that the CD-DA data or the CD-ROM data is supplied to the anti-shock controller or the CD-ROM decoder via a data input/output circuit. This is disclosed in Fig. 2, and at line 1 of page 6 and at lines 14-18 of page 6.

New claim 13 recites the feature that a subcode data and an error flag are further recorded in the memory, as disclosed at line 2 of page 7 of the specification.

New claim 14 recites the feature that the memory is a DRAM, and that the access control circuit allows an RAS signal and a CAS signal to be output from a memory control circuit. This is disclosed at lines 24 and 25 of page 5 and at line 15 of page 6 of the specification.

New claim 15 recites the feature that the signal processing circuit further comprises a refresh counter for generating a refresh timing of the memory. This is disclosed at line 11 of page 5 of the specification.

New claim 16 recites the feature that, when switching between the CD-DA data and the CD-ROM data, data written before the switching is overwritten by data after the switching. This is disclosed at lines 26-28 of page 7 of the specification.

New claim 17 recites the feature that the MP3-encoded data is supplied to the MP3 decoder from the memory. This is disclosed at lines 8-12 of page 4 of the specification.

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New claim 18 recites the feature that the first arbiter further performs read-out control in accordance with a read-out request signal from the MP3 decoder. This is disclosed at lines 11-14 of page 6 of the specification.

In addition to containing the features of claims 7, 8 or 9 from which they depend, new claims 11-18 add the features noted above which even further define over the art. Therefore, such claims are submitted to clearly distinguish patentably over the art.

In Paragraph 7 on page 4 of the Office Action, claim 2 is objected to as being dependent upon a rejected base claim but is indicated as being allowable if rewritten in independent form. Claim 2 has been rewritten in independent form, and should therefore be allowable.

Claim 5 has been amended to depend from new claim 9, and as such is also submitted to clearly distinguish patentably over the prior art, as is claim 6 which depends from claim 5.

In conclusion, claims 2 and 5-18 are submitted to clearly distinguish patentably over the prior art for the reasons discussed above. Therefore, reconsideration and allowance are respectfully requested.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 337-6846 to discuss the steps necessary for placing the application in condition for allowance.

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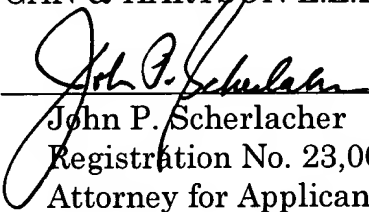
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Respectfully submitted,
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